

Supplemental Table 2. COVID subject and non-COVID control subject characteristics. Related to Figure 2 and Supplemental Figure 3.

Case	Age/Sex	Past Medical Hx	Recent Hx	Days from symptom onset to death	Autopsy findings	Lung pathology: acute Diffuse Alveolar Damage/necrotizing pneumonia	Post-mortem Interval (hours)
COVID Case 1 (IA#1)	73/M	HTN, obesity	Pneumonia, renal failure, pericardial effusion, arrhythmia, hospitalized for 8 days intubated for 3 days	16 days	<u>General Autopsy Findings:</u> Severe pulmonary congestion with multifocal hemorrhages, pleural effusion, renal cortical pallor, fibrosis and calcification on epicardial surface <u>Brain Autopsy Findings:</u> Perivascular infiltrates, eosinophilic degenerating neurons, perivascular pallor in the cerebellar white matter	+/-	38
COVID Case 2 (IA#2)	39/M	Methamphetamine use disorder, cardiac and kidney disease	Cardiac, renal and respiratory failure, pulmonary emboli, hospitalized for 3 days	2 days	<u>General Autopsy Findings:</u> Cardiac hypertrophy, pulmonary and renal infarcts <u>Brain Autopsy Findings:</u> Perivascular infiltrates	-/-	36
COVID Case 3 (NY#1)	50/M	DM, sciatica, back pain	Cough 3-5 days, found dead at home, PM swab +	days	<u>General Autopsy Findings:</u> HASCVD, fatty liver, nephrosclerosis <u>Brain Autopsy Findings:</u> Scattered acutely ischemic neurons	+/-	33
COVID Case 4 (NY#3)	39/M	Drug use disorder	Unknown, found dead in subway, PM swab +	hours to days (presumed)	<u>General Autopsy Findings:</u> Toxicology + fentanyl, heroin, alcohol, fatty liver, LVH <u>Brain Autopsy Findings:</u> Acute neuronal ischemia, focal gliosis of hippocampus	+/-	34
COVID Case 5 (NY#4)	58/F	DM, obesity, asthma, schizophrenia, had hospitalization with intubation for 1 month, discharged 1 month earlier	Unknown, found dead at home, PM swab +	days to weeks (presumed)	<u>General Autopsy Findings:</u> Fatty liver, diabetic kidney disease <u>Brain Autopsy Findings:</u> Microglial prominence and focal encephalitis (neuronophagia) of insula, basal nuclei, pons, medulla; Incidental capillary telangiectasia in pons and basal ganglia	+/-	29
COVID Case 6 (NY#5)	58/F	Obesity	GI symptoms few days, found dead at home, PM swab +	days	<u>General Autopsy Findings:</u> LVH, nephrosclerosis <u>Brain Autopsy Findings:</u> Focal mineralization of thalamic neurons	+ (with fibrin thrombi)/-	30
COVID Case 7 (NY#6)	24/M	Flu-like symptoms 3 weeks prior	Sudden death, PM swab +	3 weeks	<u>General Autopsy Findings:</u> Features of nonischemic cardiomyopathy <u>Brain Autopsy Findings:</u> Sparse perivascular parenchymal and leptomeningeal lymphocytes and microglial nodules in medulla	+/-	13

COVID Case 8 (NY#7)	55/M	HTN, DM, HLD, obesity, depression	Flu-like symptoms for few days, agitated delirium, subdued by force, hospitalized 6 days, hospital swab and PM swab +	days to weeks	<u>General Autopsy Findings:</u> Fatty liver disease and fibrosis, gunshot wounds to limbs <u>Brain Autopsy Findings:</u> Acute neuronal ischemia and microglial reaction, hippocampus, and temporal neocortex	+ (with fibrin thrombi)/-	105
COVID Case 9 (NY#8)	54/M	Old TBI from assault 3 years prior, post-traumatic seizures, DM, in nursing home	Recent flu-like symptoms, nursing home swab +	Days	<u>General Autopsy Findings:</u> Mild splenomegaly <u>Brain Autopsy Findings:</u> Subdural neomembranes, old contusions, slight perivascular lymphocytes in pons	-/- aspiration pneumonitis present	50
Control Case 1	54/M	HTN, CAD with prior MI and coronary stent placement, smoking (1ppd for ~30 yrs, quit 5 years prior to death), colorectal tumor resection (benign)	N/A	N/A	<u>Brain Autopsy Findings:</u> No significant brain pathology		15
Control Case 2	54/M	HTN, HLD, CAD with previous MI s/p pacemaker placement and CABG, CHF, atrial fibrillation, alcohol abuse, cirrhosis, end-stage kidney disease requiring dialysis, severe peripheral vascular disease complicated by lower limb gangrene requiring left lower extremity amputation	N/A	N/A	<u>Brain Autopsy Findings:</u> Hypoxic-ischemic encephalopathy, cerebrovascular disease (arteriolosclerosis)		48
Control Case 3	43/M	Bipolar disorder, schizophrenia, depression, PTSD, seasonal affective disorder, sickle cell trait, HLD, smoking (1ppd for ~25 years)	N/A	N/A	<u>Brain Autopsy Findings:</u> No significant brain pathology		28
Control Case 4	70/M	Headaches, alcohol abuse, smoking (reported "5ppd" since teens)	N/A	N/A	<u>Brain Autopsy Findings:</u> Cerebrovascular disease (arteriolosclerosis), age-related tauopathy		N/A
Control Case 5	65/M	HTN, asthma, insulin-dependent diabetes, c/2ine use, 1/2ppd smoker, unexplained mental decline and gait instability	N/A	N/A	<u>Brain Autopsy Findings:</u> Cerebrovascular disease (atherosclerosis, arteriolosclerosis), Lewy body disease/Parkinson's		38
Control Case 6	65/M	Ischemic cardiomyopathy, multi-vessel coronary artery disease, cardiac arrhythmia, HTN, HLD, DM2	Cardiac arrest in setting of ventricular tachycardia	N/A	<u>Brain Autopsy Findings:</u> Atherosclerosis, hypertensive vasculopathy		72

Control Case 7	72/M	End-stage COPD/emphysema status post bilateral lung transplant, alcohol-related non-ischemic cardiomyopathy, HTN, cardiac arrhythmia	recent bilateral lung transplant complicated by bilateral hemothoraces	N/A	<u>Brain Autopsy Findings:</u> No significant brain pathology	72
Control Case 8	84/M	Obesity, pulmonary hypertension, COPD, 60 pack-year smoking history obstructive sleep apnea, gout, HTN, DM2, BPH, CKD	Recent fall with leg injury	N/A	<u>Brain Autopsy Findings:</u> Moderate atherosclerosis	39
Control Case 9	64/M	Obesity, obstructive sleep apnea, 20 pack-year smoking history, BPH, sciatica, left knee arthroplasty	Sudden death	N/A	<u>Brain Autopsy Findings:</u> Mild hypertensive vasculopathy	50

Supplemental Table 2. COVID subject and non-COVID control subject characteristics. All COVID case deaths occurred between March and July 2020, at a time when the original strain of SARS-CoV-2 was predominant. N/A, not available.

Abbreviations: PMI, postmortem interval; CMV, cytomegalovirus; COPD, chronic obstructive pulmonary disease; DAD, diffuse alveolar damage, HTN, hypertension; CAD, coronary artery disease; MI, myocardial infarction; HLD, hyperlipidemia; CABG, coronary artery bypass grafting; CHF, congestive heart failure; DM2, diabetes mellitus type II, PTSD, post-traumatic stress disorder; BPH, benign prostatic hypertrophy, CKD, chronic kidney disease.

Related to Figure 2 and Supplemental Figure 3.